

**LESSON
4.8****Practice A***For use with pages 292–299***Write the equation in standard form. Identify a , b , and c .**

1. $2x^2 + x + 4 = 0$

2. $x^2 - 2x + 3 = 6$

3. $-3x^2 - 2 = x^2 + 3x$

4. $5x = 2x^2 - x + 9$

Find the discriminant of the quadratic equation.

5. $x^2 - x + 2 = 0$

6. $2x^2 + 3x + 2 = 0$

7. $x^2 - 2x + 1 = 0$

8. $x^2 + x - 4 = 0$

9. $3x^2 + 2x - 1 = 0$

10. $2x^2 - 4x + 5 = 0$

Find the discriminant and use it to determine if the solution has *one real*, *two real*, or *two imaginary* solution(s).

11. $x^2 + 4x + 1 = 0$

12. $x^2 - 2x + 1 = 0$

13. $x^2 + 2x + 5 = 0$

14. $2x^2 + 3x + 1 = 0$

15. $-x^2 - 4x - 6 = 0$

16. $x^2 - 5x - 6 = 0$

17. $-2x^2 + x + 4 = 0$

18. $5x^2 + 7x + 6 = 0$

Use the quadratic formula to solve the equation.

19. $x^2 - 3x + 2 = 0$

20. $x^2 + 5x + 2 = 0$

21. $x^2 - 3x + 1 = 0$

22. $3x^2 + x - 4 = 0$

23. $2x^2 - 4x - 1 = 0$

24. $2x^2 - 4x + 1 = 0$

25. $3x^2 + 2x = 0$

26. $-2x^2 - 2x - 1 = 0$

27. $5x^2 - 9x + 3 = 0$

28. $-x^2 + 3x - 4 = 2$

29. $2x^2 - 1 = 3x + 4$

30. $x^2 - 4x = -3x + 2$

31. $3x^2 + 2x = x^2 + x + 1$

32. $-x^2 - 2 = 3x^2 - 5$

33. $2x^2 - x + 3 = 3x + 7$

Solve the equation using the quadratic formula. Then solve the equation by factoring to check your solution(s).

34. $x^2 - x - 2 = 0$

35. $x^2 + 5x + 6 = 0$

36. $x^2 - 2x - 8 = 0$

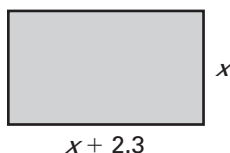
37. $x^2 + 7x + 6 = 0$

38. $2x^2 + x - 6 = 0$

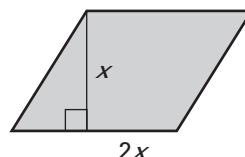
39. $3x^2 + 2x - 1 = 0$

Find the value of x .

40. Area of rectangle = 17.6



41. Area of parallelogram = 40.5



- 42. Horseshoes** A contestant tosses a horseshoe from one pit to another with an initial vertical velocity of 50 feet per second. The horseshoe is released 3 feet above the ground. Use the model $h = -16t^2 + 50t + 3$ where h is the height (in feet) and t is the time (in seconds) to tell how long the horseshoe was in the air.